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# National Cooperative Dairy Herd Improvement Program



*A plan for every size herd*

STANDARD DHIA

OWNER SAMPLER

WEIGH-A-DAY - A-MONTH

AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Dairy-Herd-Improvement Letter

ARS-44-97  
(Vol. 37, No. 3)

MARCH 1961

## INCREASED NUMBER OF NATION'S DAIRY COWS BEING BRED ARTIFICIALLY

During 1960, 7,144,679 dairy cows, or 37.0 percent of the cows and heifers that were 2 years old and over kept for milk were bred artificially. This is 212,385, or 3.1 percent, more cows than those bred artificially in 1959.

Wisconsin continued to lead the States in number of cows bred artificially, with 1,295,692 cows bred in 1960. States in which more than 250,000 cows were bred artificially in 1960 are as follows:

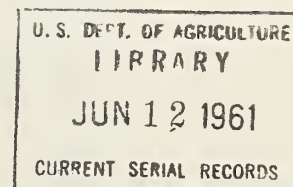
State	Number cows bred artificially	State	Number cows bred artificially
Wisconsin	1,295,692	California	347,859
New York	638,371	Iowa	337,243
Minnesota	608,292	Michigan	330,106
Pennsylvania	559,961	Illinois	259,976
Ohio	376,626		

In 19 States more than 40 percent of the cows were bred artificially in 1960. They are:

State	Percent	State	Percent
Washington	59.8	Idaho	49.7
Maine	57.0	Oregon	49.5
Pennsylvania	56.7	Michigan	47.6
Connecticut	56.2	New York	45.8
Utah	55.5	Rhode Island	43.8
New Jersey	55.3	Vermont	43.7
Wisconsin	53.4	Florida	43.2
New Hampshire	53.1	Minnesota	43.2
Massachusetts	50.6	Illinois	42.2
Ohio	49.8		

On the following pages are data showing the status of the artificial breeding program for the various States.

Issued May 1961



STATUS OF ARTIFICIAL-BREEDING PROGRAM IN THE UNITED STATES 1939-61

Year	Sires in service			Cows bred		Proved sires in service			Daughters		
	Studs	Total	Proved	Average per stud	Herds	Total	Average per sire	Total	Dams		
									Milk	Fat	Fat
	Number	Number	Pct.	Number	Number	Number	Number	Number	Pounds	Pounds	Pounds
1939	7	33	-	4.7	646	1/ 7,359	228	-	-	-	-
1940	25	138	-	5.5	2,971	1/ 33,977	246	-	-	-	-
1941	35	237	-	6.8	5,997	1/ 70,751	299	-	-	-	-
1942	46	412	-	9.0	12,118	1/ 112,788	274	-	-	-	-
1943	59	574	23.5	9.7	23,448	1/ 182,524	318	135	9,559	387	10,155
1944	56	657	19.6	11.7	28,627	1/ 218,070	332	129	9,965	391	10,490
1945	67	729	20.2	10.9	43,998	1/ 360,732	495	147	9,629	387	10,488
1946	78	900	23.2	11.5	73,293	537,376	597	209	10,270	401	10,741
1947	84	1,453	23.1	17.3	140,571	1,184,168	815	335	10,099	405	10,580
1948	91	1,745	24.4	19.2	224,493	1,713,581	982	426	10,161	407	10,576
1949	90	1,940	26.5	21.6	316,177	2,091,175	1,078	514	10,157	412	10,499
1950	97	2,104	26.6	21.7	2/ 409,300	2,619,555	1,245	559	10,236	415	10,734
1951	94	2,187	29.0	23.3	2/ 548,300	3,509,573	1,605	634	10,267	419	11,009
1952	94	2,324	29.6	24.7	2/ 671,100	4,295,243	1,848	688	10,310	422	11,210
1953	96	2,598	36.7	27.1	2/ 755,000	4,845,222	1,865	953	10,375	429	11,176
1954	93	2,661	36.1	28.6	2/ 805,000	5,155,240	1,937	960	10,483	432	11,239
1955	79	2,450	36.0	31.0	2/ 845,900	5,413,874	2,210	883	10,575	436	11,265
1956	79	2,553	36.5	32.3	2/ 900,400	5,762,656	2,257	932	10,600	438	11,301
1957	75	2,651	40.5	35.3	2/ 946,000	6,055,982	2,284	1,074	10,626	440	11,304
1958	71	2,676	37.8	37.7	2/ 975,372	6,645,568	2,483	1,012	10,772	446	11,345
1959	64	2,460	39.1	38.4	2/ 930,059	6,932,294	2,816	963	10,918	451	11,493
1960	62	2,544	3/ 18.8	41.0	2/ 815,964	7,144,679	2,808	3/ 477	3/ 10,790	3/ 437	3/ 10,792
1961	56	2,486	-	44.4	-	-	-	-	-	-	-

1/ Prior to 1946 cows were reported only on the basis of enrollment.

2/ Estimated.

3/ Prior to 1960 proved sires in artificial breeding service included records of both non-AB and AB progeny. In 1960 proved sires in artificial breeding service include records of AB progeny only.

STATUS OF ARTIFICIAL-BREEDING PROGRAM  
(January 1, 1961)

State	Studs	Herds <sup>1/</sup>	Cows bred in State during 1960		Milk cows in United States <sup>2/</sup>	
			Reg- istered <sup>1/</sup>	Total	Total	Bred artificially
	Number	Number	Number	Number	Thousands	Percent
Alabama <sup>3/</sup> -----	0	3,100	5,242	43,913	262	16.8
Alaska-----	1	100	74	1,466	-	-
Arizona-----	1	400	1,970	12,980	53	24.5
Arkansas-----	1	4,702	3,329	30,640	229	13.4
California-----	5	17,338	29,931	347,859	899	38.7
Colorado-----	1	3,000	3,818	28,652	135	21.2
Connecticut-----	1	4,000	7,652	55,621	99	56.2
Delaware <sup>3/</sup> -----	0	810	2,458	11,423	29	39.4
Florida <sup>3/</sup> -----	0	2,550	11,967	91,960	213	43.2
Georgia <sup>3/</sup> -----	0	1,200	4,369	41,026	233	17.6
Hawaii-----	1	11	407	6,854	-	-
Idaho <sup>3/</sup> -----	0	12,000	11,379	109,861	221	49.7
Illinois-----	3	41,176	36,776	259,976	616	42.2
Indiana-----	1	34,500	19,668	161,670	473	34.2
Iowa-----	2	70,387	17,859	337,243	934	36.1
Kansas-----	1	15,949	9,673	97,637	370	26.4
Kentucky-----	1	32,000	2,063	118,933	555	21.4
Louisiana-----	1	7,360	6,086	56,951	274	20.8
Maine-----	1	3,500	935	60,439	106	57.0
Maryland-----	1	9,750	11,321	86,360	232	37.2
Massachusetts <sup>3/</sup> ---	0	3,580	7,287	51,563	102	50.6
Michigan-----	1	33,000	31,940	330,106	694	47.6
Minnesota-----	2	78,000	28,672	608,292	1,407	43.2
Mississippi-----	1	4,500	971	27,528	404	6.8
Missouri-----	1	39,462	13,884	152,120	709	21.5
Montana <sup>3/</sup> -----	0	1,000	1,218	12,862	82	15.7
Nebraska-----	1	14,803	5,413	67,185	347	19.4
Nevada <sup>3/</sup> -----	0	117	421	3,581	18	19.9
New Hampshire-----	1	3,183	8,369	30,779	58	53.1
New Jersey-----	2	3,348	9,595	76,813	139	55.3
New Mexico <sup>3/</sup> ----	0	250	893	12,558	45	27.9
New York-----	1	50,000	118,280	638,371	1,393	45.8
North Carolina---	1	18,000	9,552	82,508	299	27.6
North Dakota <sup>3/</sup> --	0	7,016	665	24,359	287	8.5
Ohio-----	2	62,000	55,307	376,626	757	49.8
Oklahoma <sup>3/</sup> -----	0	1,685	2,017	16,922	275	6.2
Oregon-----	1	9,626	8,597	87,565	177	49.5
Pennsylvania-----	5	54,844	63,824	559,961	988	56.7
Puerto Rico-----	1	997	150	18,477	-	-
Rhode Island <sup>3/</sup> --	0	325	969	6,568	15	43.8
South Carolina---	1	1,700	4,360	27,232	120	22.7
South Dakota <sup>3/</sup> --	0	1,400	1,928	20,823	273	7.6
Tennessee-----	3	19,500	6,292	110,615	521	21.2
Texas-----	1	4,750	3,423	71,611	610	11.7
Utah-----	1	5,868	3,366	59,341	107	55.5
Vermont <sup>3/</sup> -----	0	8,643	16,872	125,857	288	43.7
Virginia-----	1	11,000	16,817	97,887	382	25.6
Washington-----	1	22,000	10,299	156,192	261	59.8
West Virginia <sup>3/</sup> --	0	6,500	2,868	27,329	141	19.4
Wisconsin-----	6	84,413	87,282	1,295,692	2,426	53.4
Wyoming <sup>3/</sup> -----	0	621	619	5,892	33	17.9
United States----	56	815,964	709,127	7,144,679	19,291	37.0

<sup>1/</sup> Estimated.

<sup>2/</sup> Agricultural Marketing Service estimate of number of cows and heifers 2 years old and over kept for milk.

<sup>3/</sup> Buys semen from studs in other States.



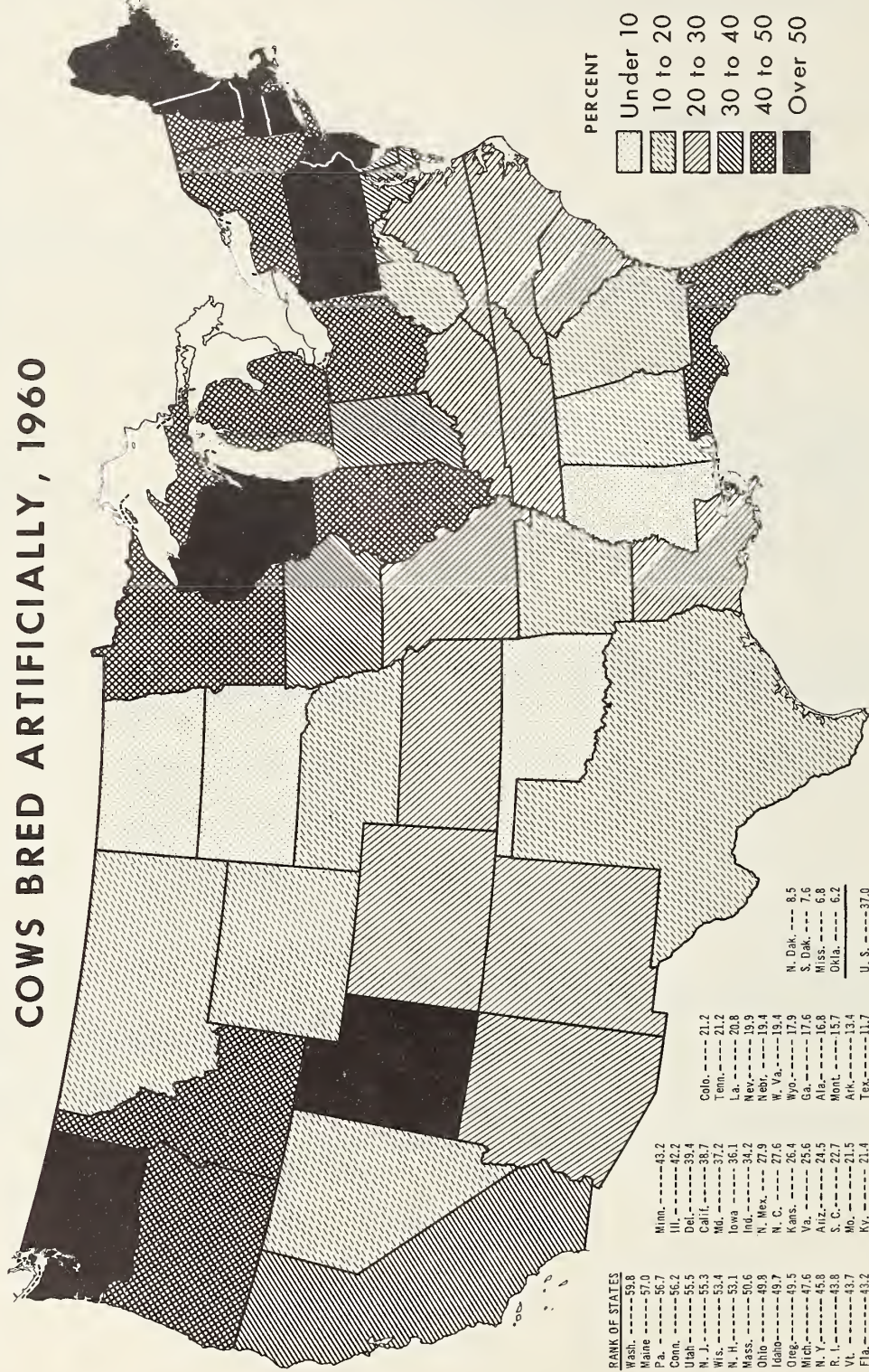
## ARTIFICIAL-BREEDING ORGANIZATION BULL STUDS, JANUARY 1, 1961

State, Name and Location of Studs	Number and breed of bulls used										Total cows bred 1960
	Ayr- shire	Brown Swiss	Guern- sey	Hol- stein	Jer- sey	Red Dane	Red Poll	Short- horn	Beef	Total	
<b>ALASKA</b>											
Matanuska Valley Breeders Association, Palmer-----	-	-	-	5	-	3	-	-	-	8	1,238
<b>ARIZONA</b>											
Eads Cattle Breeding Service, 3030 E. Thomas Rd., Phoenix-----	-	-	-	5	-	-	-	-	-	5	580
<b>ARKANSAS</b>											
Arkansas Dairy Breeders Association, Fayetteville-----	-	-	6	10	6	-	-	3	4	29	10,168
<b>CALIFORNIA</b>											
Adohr Farms Inseminating Service, Route 1, Box 118, Camarillo-----	-	-	11	13	-	-	-	-	-	24	8,992
California Dairy Breeders, Inc., P.O. Box 188, Davis-----	-	-	8	11	7	-	-	-	4	30	49,363
Excelsior Art. Breeding Service, 7401 Adams St., Corona-----	-	-	2	7	-	-	-	-	-	9	15,756
Pacific Breeders Co-op., Inc., Petaluma-----	-	-	5	8	6	-	-	-	1	20	21,469
Jessup Breeders, 11638 E. Artesia Blvd., Artesia-----	-	4	13	24	7	-	-	1	2	51	84,415
Total-----	-	4	39	63	20	-	-	1	7	134	179,995
<b>COLORADO</b>											
Colorado State University ABS, Fort Collins-----	-	-	1	3	1	-	-	1	8	14	13,956
<b>CONNECTICUT</b>											
New England Selective Breeding Assn., Inc., Woodbridge-----	6	2	14	22	13	-	-	-	-	57	121,968
<b>HAWAII</b>											
Haleakala Dairy Farm ABA-----	-	-	-	2	-	-	-	-	-	2	1,206
<b>ILLINOIS</b>											
Curtiss Breeding Service, Inc., Cary-----	7	13	31	68	15	-	-	8	44	186	704,725
Northern Illinois Breeding Co-op., Route 1, Hampshire-----	-	9	12	30	-	-	-	3	1	55	104,938
Southern Illinois Breeding Association, Breese-----	-	3	7	16	6	-	-	3	10	45	70,030
Total-----	7	25	50	114	21	-	-	14	55	286	879,693
<b>INDIANA</b>											
John A. Newman & Sons, Route 2, Culver-----	-	-	-	8	-	-	-	-	-	8	1,130
<b>IOWA</b>											
Eastern Iowa ABA, Box 1751, Cedar Rapids-----	3	6	9	20	3	-	-	4	18	63	181,123
Iowa Breeders Co-op., Cornell & Hoffman Rd., Des Moines 13-----	-	-	-	30	3	-	-	-	12	45	100,388
Total-----	3	6	9	50	6	-	-	4	30	108	281,511
<b>KANSAS</b>											
Kansas ABS Unit, Kansas State University, Manhattan-----	4	6	6	15	5	-	-	4	4	44	50,600
<b>KENTUCKY</b>											
Kentucky Art. Breeding Assn., 640 Herr Lane, Louisville 7-----	-	5	7	11	8	-	-	-	7	38	102,015
<b>LOUISIANA</b>											
Louisiana ABA Inc., Box 8907 Louisiana State Univ., Baton Rouge 3-----	-	-	5	10	9	-	-	-	3	27	54,020
<b>MAINE</b>											
Maine Breeding Cooperative, Inc., Route 1, Augusta-----	3	1	13	12	8	-	-	4	2	43	55,826
<b>MARYLAND</b>											
Maryland Artificial Breeding Cooperative, Inc., College Park-----	6	4	11	12	6	-	-	-	-	39	96,421
<b>MICHIGAN</b>											
Michigan ABC Inc., Box 511, Michigan State University, E.Lansing--	3	5	17	39	9	4	-	6	16	99	248,130
<b>MINNESOTA</b>											
Consolidated Breeders Cooperative, Inc., Anoka-----	-	5	8	24	5	-	-	5	11	58	228,073
Minnesota Valley Breeders Association, New Prague-----	3	3	10	30	6	-	-	3	11	66	307,675
Total-----	3	8	18	54	11	-	-	8	22	124	535,748
<b>MISSISSIPPI</b>											
Mississippi ABC, Box 354, State College-----	-	-	6	6	13	-	-	-	4	29	20,451
Tupelo Breeding Service (discontinued)-----	-	-	-	-	-	-	-	-	-	-	570
Total-----	-	-	6	6	13	-	-	-	4	29	21,021
<b>MISSOURI</b>											
M.F.A. Dairy Breeders, P.O. Box 591, Springfield-----	-	4	16	15	18	-	-	6	18	77	78,928

State, Name and Location of Studs	Number and breed of bulls used										Total cows bred 1960
	Ayr- shire	Brown Swiss	Guern- sey	Hol- stein	Jer- sey	Red Dane	Red Poll	Short- horn	Beef	Total	
NEBRASKA											
Nebraska Dairy Breeders Association, Fremont-----	-	4	6	13	1	-	-	6	14	44	40,602
NEW HAMPSHIRE											
New Hampshire-Vermont Breeding Association, Box 350, Concord-----	1	-	9	15	13	-	-	-	4	42	64,130
NEW JERSEY											
New Jersey Cooperative Breeders Association, Inc., Annandale-----	-	3	11	20	5	-	-	-	4	43	40,010
Sussex County Cooperative Breeding Association, Sussex-----	-	-	5	15	-	-	-	-	-	20	13,524
Total-----	-	3	16	35	5	-	-	-	4	63	53,534
NEW YORK											
New York ABC, Inc., Route 2, Box 528, Ithaca-----	12	11	18	58	15	-	-	-	9	123	522,711
NORTH CAROLINA											
North Carolina Institutional Breeding Program, Raleigh-----	-	-	-	13	-	-	-	-	3	16	1,000
OHIO											
Central Ohio Breeding Assn., 1224 Alton-Darby Rd., Columbus 4-----	6	6	23	29	15	-	4	3	-	86	236,232
Northern Ohio Breeding Assn., Route 4, Tiffin-----	-	-	18	29	18	-	-	-	15	80	206,414
Total-----	6	6	41	58	33	-	4	3	15	166	442,646
OREGON											
Oregon Dairy Breeders Association, Box 48, Corvallis-----	-	-	9	9	10	-	-	-	9	37	53,075
PENNSYLVANIA											
First Pennsylvania Artificial Breeding Cooperative, Lewisburg-----	-	-	12	14	-	-	-	-	8	34	57,624
Lehigh Valley Farmers Assn., 1000-1160 N. 7th St., Allentown-----	4	2	7	15	3	-	-	-	6	37	34,069
NEPA Artificial Breeding Co-op., P.O. Box 26, Tunkhannock-----	5	-	10	16	8	-	-	-	-	39	106,804
Southeastern Pennsylvania ABC, Box 254, Lancaster-----	3	1	9	12	4	-	-	-	4	33	144,203
Western Pennsylvania ABC, Box 550, Clarion-----	5	5	10	14	10	-	-	-	9	53	140,672
Total-----	17	8	48	71	25	-	-	-	27	196	483,372
PUERTO RICO											
Puerto Rico Artificial Breeding Assn., Box 61, Bayamon-----	-	7	-	15	-	-	-	-	-	22	18,392
SOUTH CAROLINA											
Chester Cooperative Breeding Assn., Chester-----	-	-	6	-	-	-	-	-	-	6	1,792
TENNESSEE											
East Tennessee ABA, Route 14, Knoxville-----	2	-	5	7	6	-	-	-	3	23	37,448
Tennessee Artificial Breeding Association, Brentwood-----	-	4	6	6	8	-	-	2	4	30	37,764
West Tennessee Artificial Breeding Association, Yorkville-----	-	-	-	8	8	-	-	-	6	22	12,333
Total-----	2	4	11	21	22	-	-	2	13	75	87,545
TEXAS											
Texas A & M College, Dairy Breeding Center, College Station-----	-	-	-	2	3	-	-	-	4	9	652
UTAH											
Cache Valley Breeding Association, Logan-----	2	2	3	13	4	-	-	2	6	32	84,956
VIRGINIA											
Virginia ABA, Inc., Route 4, Rocky Mount-----	-	-	7	11	5	-	-	-	5	28	66,213
WASHINGTON											
Evergreen Northwest Breeders, Inc., Box 197, Burlington-----	3	3	14	15	10	-	-	4	9	58	126,938
WISCONSIN											
American Breeders Service, Madison-----	1	4	13	55	14	-	6	2	17	112	1,357,875
Associated Breeding Service, Inc., Lena-----	-	-	4	9	-	-	-	-	3	16	22,039
Badger Breeders Cooperative, Shawano-----	-	6	20	24	5	-	-	-	6	61	382,042
East Central Breeders Assn., Coop., 314 Beaver Dam St., Waupun-----	-	4	5	23	-	-	-	-	6	38	84,891
Piper Bros. Farms, Inc., Watertown-----	2	2	8	40	7	-	-	1	-	60	116,795
Tri-State Breeders Co-op., Westby-----	-	6	26	50	7	-	-	8	14	111	399,325
Total-----	3	22	76	201	33	-	6	11	46	398	2,362,967
UNITED STATES-----											
	81	140	482	1,006	333	7	10	79	348	2,486	7,144,679



# COWS BRED ARTIFICIALLY, 1960



U. S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE



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Growth Through Agricultural Progress